

WHAT IS CLAIMED

1. A wireless communication architecture comprising:

a transceiver that is adapted to transmit on a first of a plurality of communication channels and to receive  
5 on a second of said plurality of communication channels, and having a transmission channel connector and a receiver channel connector supported in a prescribed spatial orientation by a radio transceiver support structure; and

10 a diplexer having an interface port adapted to interface wireless communication energy with a telecommunication channel, and first and second transceiver-coupling port connectors supported in said prescribed spatial orientation by a diplexer support structure, and wherein, for a first orientation and insertion of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector  
15 of said radio transceiver, and the other of which is blind-engageable with said receiver channel port connector of said radio transceiver, and wherein, for a second orientation and insertion of said diplexer structure with respect to said transceiver support structure, said one of said first and second transceiver-coupling port connectors is blind-engageable with said receiver channel port connector of said radio  
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transceiver, and the other of said first and second transceiver-coupling port connectors is blind-engageable  
30 with said transmission channel port connector of said radio transceiver.

2. The wireless communication architecture according to claim 1, further comprising a diplexer guide structure configured to guide said diplexer, which has been placed in one of said first and second orientations,  
5 to an insertion location adjacent to said radio transceiver that brings said transmission channel and receiver channel connectors of said diplexer support structure into engagement with respective ones of said transceiver-coupling port connectors of said transceiver  
10 support structure.

3. A radio architecture comprising:  
a radio transceiver that is adapted to transmit on a first of a plurality of communication channels and to receive on a second of said plurality of communication  
5 channels, and having a transmission channel connector and a receiver channel connector supported in a prescribed spatial orientation by a radio transceiver support structure; and

a diplexer having an antenna port adapted to be  
10 coupled to an antenna, and first and second transceiver-coupling, blind-mating connectors supported in said prescribed spatial orientation by a diplexer support

structure, and wherein, for a first orientation of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling, blind-mating connectors engages said transmission channel port connector of said radio transceiver, and the other of which engages said receiver channel port connector of said radio transceiver, and wherein, for a second orientation of said diplexer structure with respect to said transceiver support structure, said one of said first and second transceiver-coupling, blind-mating connectors engages said receiver channel port connector of said radio transceiver, and the other of said first and second transceiver-coupling, blind-mating connectors engages said transmission channel port connector of said radio transceiver.

4. The radio architecture according to claim 3, further comprising a diplexer guide structure configured to guide said diplexer, which has been placed in one of said first and second orientations, to a location adjacent to said radio transceiver that brings said transmission channel and receiver channel connectors of said diplexer support structure into engagement with respective ones of said transceiver-coupling port connectors of said transceiver support structure.

5. For use with a wireless communication device having a transceiver adapted to transmit on a first of a plurality of communication channels and to receive on a second of said plurality of communication channels, and  
5 having a transmission channel port and a receiver channel port, and a diplexer having an interface port adapted to interface wireless communication energy with a telecommunication channel, and first and second transceiver-coupling ports that are connectable with  
10 selected ones of said transmission and receive channel ports of said transceiver, a method of interfacing said first and second transceiver-coupling ports of said diplexer with said selected ones of said transmission and receive channel ports of said transceiver, said method  
15 comprising the steps of:

(a) providing said transceiver with a transmission channel port connector and a receiver channel port connector that are supported in a prescribed spatial relationship by a transceiver support structure;  
20 (b) providing said first and second transceiver-coupling ports of said diplexer with associated first and second RF connectors that are supported in said prescribed spatial relationship by a diplexer support structure, so that for a first orientation and insertion  
25 of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector

of said transceiver, and the other of which is blind-  
30 engageable with said receiver channel port connector of  
said transceiver, and wherein, for a second orientation  
and insertion of said diplexer structure with respect to  
said transceiver support structure, said one of said  
first and second transceiver-coupling port connectors is  
35 blind-engageable with said receiver channel port  
connector of said transceiver, and the other of said  
first and second transceiver-coupling port connectors is  
blind-engageable with said transmission channel port  
connector of said transceiver;

40 (c) placing said diplexer support structure in one  
of said first and second orientations; and

(d) inserting said diplexer support structure into  
said transceiver support structure, and thereby causing  
said one of said first and second transceiver-coupling  
45 port connectors to blind-engage said transmission channel  
port connector of said transceiver, and the other of said  
first and second transceiver-coupling port connectors to  
blind-engage said receiver channel port connector of said  
transceiver.

6. The method according to claim 5, further  
comprising the steps of:

(e) changing the frequency plan of said transceiver  
by  
5 removing said diplexer support structure

from said transceiver support structure,

placing said diplexer support structure in  
the other of said first and second orientations, and

reinserting said diplexer support  
10 structure into said transceiver support structure, and  
thereby causing said other of said first and second  
transceiver-coupling port connectors to blind-engage said  
transmission channel port connector of said transceiver,  
and said one of said first and second transceiver-  
15 coupling port connectors to blind-engage said receiver  
channel port connector of said transceiver.

7. The method according to claim 5, wherein step  
(d) comprises providing said wireless communication  
device with a diplexer guide structure that is configured  
to guide said diplexer, when placed in either of said  
5 first and second orientations, to an insertion location  
adjacent to said transceiver that brings said  
transmission channel and receiver channel port connectors  
of said diplexer support structure into engagement with  
respective ones of said transceiver-coupling port  
10 connectors of said transceiver support structure.